

**REMARKS****Claim Rejections under 35 USC §102**

In the December 5, 2008, Office Action, the Examiner rejected claims 1-3, 5, 6, 10, and 12 under 35 USC 102(b) as being anticipated by Pataki et al (US 5,396,926). For the following reasons, reconsideration and withdrawal of these rejections are respectfully requested.

The Office Action on page 3 line 5 identifies Pataki's element (8) with a source of high pressure fuel. However, it is apparent from the Pataki written description (column 9 lines 9-13) that the valve passage (8) is actually connected to a load device, such as a hydraulic cylinder or a fuel injection nozzle, so the passage (8) cannot be interpreted as a *source* of high pressure fuel to the control valve. Pataki expressly states, "Valve passage 6 is a high pressure fluid supply passage and may be connected with a source of high pressure fuel for an internal combustion engine." (col 8 lines 58-60). The Examiner points to lines 9-13 of column 9 of Pataki to assert that Pataki's element (8) can be a high pressure fuel supply to a fuel injector. The cited passage relied upon by the Examiner states, "Valve passage 8 may be connected *to supply pressure to a load device* such as a hydraulic cylinder, fuel injection nozzle or the like." Applicants maintain that Pataki's element (8) can only be analogized to a high pressure fuel supply to a fuel injector by virtue of the fact that it is the *output* of a control valve whose high pressure *source* is element (6). Characterizing element (8) as a high pressure fuel supply from a control valve to a fuel injector does not make (8) a high pressure fuel supply to the control valve. Because element (8), the *output* of a control valve, can also be a low pressure supply to an output load (for example when the valve elements are in the positions of Fig. 1, with seating 44 engaged to isolate (8) from the high

pressure source (6) and seating 38 disengaged to allow communication between (8) and drain passage (10)), element (8) cannot reasonably be characterized as a high pressure source *to the control valve arrangement*.

Additionally, the examiner first identifies element (40) in Pataki as the control chamber of Applicants' claimed invention (page 3 line 5). Later, the Examiner identifies element (41) in Pataki as the control chamber (page 3 lines 9, 10, and 15). Applicant respectfully submits that element (41) in Pataki is identified as "a second outer annular recess 41 in fluid communication with supply passage 6" (col 10 lines 15-16). As such, the pressure in 41 will be the supply pressure regardless of the position of the valve elements, and thus cannot represent a control chamber whose fuel pressure is controllable by the control valve, as specified in Applicants' claims 1 and 17. As previously submitted in the remarks of Applicants' 2/28/2008 response, when Pataki's element (6) is correctly identified as a high pressure source and element (10) is identified as a low pressure drain passage, the control chamber in Pataki can only be interpreted as represented by the combination of Pataki's valve passage (8) and annular recess (40).

Applicants' claims 1 and 17 recite in part a control valve member moveable to a second position wherein the control valve member engages a second seating such that the control chamber communicates with the low pressure fuel drain and communication between the control chamber and the source of high pressure fuel is broken. Treating Pataki's element (6) as the source of high pressure fuel, element (10) as the fuel drain, and elements (8)/(40) as the control chamber, the corresponding "second seating" in Pataki that engages to break communication between the control chamber (8)/(40) and the source of high pressure fuel (6) is seating (44). However, the Applicants' claims 1 and 17 also specify that the second seating is defined by a surface of a bore provided in a valve housing within which the control valve

member is moveable. In contrast, Pataki recites, “Additionally, formed in cavity 14 of the moveable valve member 12 is a valve seat 44 which cooperates with an upper surface 46 of the floating pin 16 in order to seal fluidic communication between an inner annular recess 48 formed in the moveable valve member 12 and the first outer annular recess 40 and consequently the outlet passage 8.” (col 10 lines 20-26). Because Applicants’ second seating is specified in claims 1 and 17 to be defined by a surface of a bore provided in a valve housing within which the control valve member is moveable, it cannot be anticipated by Pataki’s corresponding seating (44) defined internal to the valve member (12).

Applicants further submit that Pataki does not teach a restricted flow passage located between the first seating and the second seating and defined by an outer surface of the control valve member and the bore in the valve housing, as required by Applicants’ claimed invention in claims 1 and 17. The only flow path shown in Pataki located between the first seating (38) and the second seating (44) is the path through cavity (14), the parallel combination of two radial passages (42), and outer annular recess (40). There is no teaching in Pataki of this path being a restricted flow passage. Additionally, Pataki does not teach this path as defined by an outer surface of the control valve member and the bore in the valve housing, as recited in the Applicants’ claims. Therefore, Pataki does not anticipate the restricted flow passage as specified by the Applicants’ claims 1 and 17.

For at least the reasons cited above, Pataki does not anticipate the Applicants’ claimed invention in independent claims 1 and 17. Applicants respectfully request the 35 USC 102(b) rejection of claim 1 be withdrawn and that claim 1 be allowed. For at least the reason that claims 2, 3, 5, 6, 10, and 12 depend from claim 1 which is believed to be in condition for allowance, Applicants respectfully request that the 35 USC 102(b) rejection of these claims also be withdrawn and that claims 2, 3, 5, 6, 10, and 12 be allowed.

**Claim Rejections under 35 USC §103**

In the December 5, 2008, Office action, the Examiner rejected claims 17 and 19 under 35 USC 103(a) as being unpatentable over Pataki in view of Harcombe (US 6,889,918). For the following reasons, reconsideration and withdrawal of these rejections are respectfully requested.

As discussed above, Applicants believe that claims 1 and 17 as previously presented overcome the Examiner's rejections under section 102 in regard to Pataki. Applicants also submit that the claims also distinguish over any combination of Pataki and Harcombe. As discussed fully above in regard to the Pataki reference, neither Pataki nor Harcombe, alone and in combination, discloses, teaches or suggests all of the elements of Applicants' independent Claims 1 and 17, which both require:

- (1) a restricted flow passage located between the first seating and the second seating. The only flow path shown in Pataki located between the first seating (38) and the second seating (44) is the path through cavity (14), the parallel combination of two radial passages (42), and outer annular recess (40). There is no teaching in Pataki of this path being a restricted flow passage, so Pataki does not teach or suggest the Applicants' restricted flow passage as specified in claims 1 and 17 and Harcombe does not overcome this deficiency.
- (2) the restricted flow passage located between the first seating and the second seating being defined by an outer surface of the control valve member and the bore in the valve housing. The only flow path shown in Pataki located between the first seating (38) and the second seating (44) is the path through cavity (14), the parallel combination of two radial passages (42), and outer annular recess (40). Pataki does

not teach this path as defined by an outer surface of the control valve member and the bore in the valve housing, as recited in the Applicants' claims, so Pataki does not teach or suggest the Applicants' restricted flow passage as specified in claims 1 and 17 and Harcombe does not overcome this deficiency.

As discussed fully above, Pataki and Harcombe, both alone and in combination, fail to anticipate or render obvious all of the elements of Applicants' independent Claims 1 and 17. Thus, Applicants respectfully submit that Claims 1 and 17 are allowable over Pataki in view of Harcombe. Since Claim 19 depends from claim 1, Claim 19 is also allowable. Reconsideration and withdrawal of these rejections are requested.

### **Double Patenting**

In the July 1, 2008, Office action, the Examiner rejected claims 1-3, 5, 6, 10, 12, 17, and 19 on grounds of the prohibition against obviousness type double patenting. The Examiner alleged that the claims are unpatentable over claims 1-10 of US Patent no. 6,889,918 in view of Pataki. In support of that rejection, the Examiner asserted that Pataki teaches that a restricted area is provided between first and second seating portions. As discussed above, the only flow path shown in Pataki located between the first seating (38) and the second seating (44) is the path through cavity (14), the parallel combination of two radial passages (42), and outer annular recess (40). There is no teaching in Pataki of this path being a restricted flow passage. Therefore, reconsideration and withdrawal of these rejections are respectfully requested.

Accordingly, Applicants respectfully submit that independent claims 1 and 17 are allowable. Also, since claims 3, 5, 10, 12, and 19 depend from claim 1, claims 3, 5, 10, 12, and 19 are also allowable. Reconsideration and withdrawal of these rejections are requested.

Applicant notes that the Detailed Action section of the December 5, 2008 Office Action includes claims 2 and 6 in the claim rejections, and submits that claims 2 and 6 were cancelled in Applicants' October 1, 2008 Response to Office Action.

### **CONCLUSION**

In view of the foregoing, Applicants request the withdrawal of the rejections to the claims. Reconsideration of the application and allowance of all pending claims is earnestly solicited. Accordingly, the Examiner is requested to reconsider and allow claims 1, 3, 5, 10, 12, 17, and 19 and to pass the case to issue.

Should the Examiner wish to discuss any of the above in greater detail or deem that further amendments should be made to improve the form of the claims, the Examiner is invited to contact the undersigned at the Examiner's convenience.

Please charge any necessary fees, including any extension of time, or any other fee deficiencies to Delphi Technologies, Inc., Deposit Account No. 50-0831.

Respectfully submitted,

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